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**PREPARATION OF DOUBLE METAL CYANIDE CATALYST**

ABSTRACT

10 The present invention relates to a process for  
the preparation of a double metal cyanide (DMC)  
catalyst, which process involves:  
(a) combining an aqueous solution of a metal salt  
with an aqueous solution of a metal cyanide salt and  
reacting these solutions; and  
15 (b) recovering the DMC catalyst from the reaction  
mixture,  
in which process the DMC catalyst is prepared in the  
presence of from 0.03 to 0.4 mole of alkaline metal  
compound, based on amount of metal salt.

20 Further, the present invention relates to DMC  
catalyst obtainable by such process, to DMC catalyst  
prepared from a metal salt and a metal cyanide salt  
in which the molar ratio of metal derived from the  
metal salt to metal derived from the metal cyanide  
25 salt is at least 2.25 and to a process for  
polymerization of alkylene oxides which process  
involves reacting initiator with alkylene oxide in  
the presence of at most 15 ppm of DMC catalyst. It  
also relates to a process for the polymerization of  
30 alkylene oxides in which the resulting polyol  
contains less than 60 ppm of ultra-high molecular  
weight compounds.